

Work Order ID 55486

January 19, 2010 1:33:36 PM

Page 1

Item ID: D350-591-121

Accept

Setup Start

Revision ID:

Stop

Item Name: Heli-Access-Step, LH

Start Date: 1/19/10 Start Qty: 4.00

Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals: Process Plan:

Date: 10-1-29 Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2351

Rev E

0.00



DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile and type labels as per PPP D350-591-121 CHG005

0.00

8/6/25

for BG 10/02/25

110



Large Fab

Large Fab

Large Fab

Memo

1-Cut D2244-116 extrusion to 55.32" long as per Dwg D2351 using cutting table setup DT8185-G

2-Drill extrusion per Dwg D2351 using Jig DT8230 for rivets.

3-Deburr

0.00

0.00

5

170

10.01.28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-21-28	178	cut 1 extra step for head test	1	10-21-28			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Start Date: 1/19/10 Start Qty: 4.00



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Customer:

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Run Start



Stop



Approvals: Process Plan: Date: Tooling: Date:

QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120



CNC Bend 1

CNC Delta 100 Bender

BENDING MACHINE - SKIDTUBES

Memo

Bend as per Dwg D2351-041 using CNC Bender 1 and Folio FT011. Use Bend Program D2351-041.

0.00

0.00

10-2-1

5

Plb →

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

⇒ Solderlay

4

Plb →

140



Large Fab

Large Fab

Large Fab

Memo

1-Bevel Fwd and Aft end for welding

2-Weld Aft End Bracket per QSI 004 & Dwg D2351 using Welding Jig DT8033

A/RAluminum Rod M111494
M112130

3-Do not Grind Flush

0.00

0.00

10-02-04

4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D350-591-121 PAR #: Fault Category: Large Fub NCR: (Yes) No DQA: Date: 10.03.02
 Resolution: ① & 2. SCRAP Disposition: Scrap QA: N/C Closed: Date: 10/03/02

NCR: 55486		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
① 10/2/01	120	During inspection Found that Qty 13 steps were over bent and do not fit the weldin 39. steps R.L. Process.	<u> </u>	→ cut 3 to length and drill hole according to Dwg. + rebore → Re bend	<u> </u> 10.02.02 <u> </u> 10.2.3	<u> </u> S 10/2/01	<u> </u>	<u> </u> S 10/2/01
			<u> </u>	→ scrap + destroy qty x3 Reple with new M# <u>38023</u>	<u> </u> 10.02.02 <u> </u>	<u> </u> S 10/2/01	<u> </u>	<u> </u> S 10/2/01
② 10/2/04	120	Qty +1 of Replacement is over bent. R.L. Process / First of 3 bent.	<u> </u>	Qty +1 Scrap + Destroy no replx original Qty is for 4	<u> </u> 10.02.04 <u> </u>	<u> </u> S 10/2/04	<u> </u>	<u> </u> S 10/2/04

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Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

PD 10.02.08 (A)

160

QC5- Inspect part completeness to step on W/O

0.00



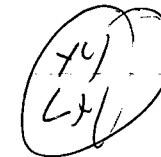
QC

Memo

0.00

Quality Control

8/10/2/08



170

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

8/10-02-08

4

H:\FORMS

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Approvals: Process Plan: Date: Tooling: Date:

Stop

QC: Date: SPC (Y/N): Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC3- Inspect Part Finish

0.00

→ 21/10

10/04/08

4

0

QC

Memo

0.00

Quality Control

190

Large Fab

0.00

Large Fab

Memo

0.00

10.02.10

4

0

Large Fab

1-Rivet Leg Assembly as per Dwg D2351

200

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

N/A 1/10/02/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Required Date: 1/25/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 	Large Fab	0.00				4	0		
Large Fab	Memo	0.00							
Large Fab	1-Weld Fwd End Plate per QSI 004 & Dwg D2351 A/RAluminum Rod <u>m111311</u>								
	2-Grind end cap flush per dwg D2351								
220 	QC9- Inspect visual per QSI004- Fusion Welds ✓	0.00				4	0		BE 10/02/18
QC	Memo	0.00							
Quality Control	 10/02/18								
230 	QC5- Inspect part completeness to step on W/O	0.00				4	0		BE 10/02/18
QC	Memo	0.00							
Quality Control	 10/02/18								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Customer:

Reference:

Run Start

Approvals: Process Plan: Date: Tooling: Date:

Stop

QC: Date: SPC (Y/N): Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

240

Chemical Conversion Coat per QSI005 4.1

0.00



0.00 => M 10/02/25

(X4 Wk) Ø

HandFinish

Memo

Hand Finishing

250

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



M 113170

0.00 => M 10/02/25

(X4 Wk) Ø

Powdercoat

Memo

Powder Coating

START TIME: 8:30 AM
OVEN TEMPERATURE: 320°F
FINISH TIME: 9:00 PM

260

Pressure Wash per QSI005 4.3

0.00



10.02.25 Wing Walk Batch: M 113462

0.00 => M-L 10/02/25

(4X)

HandFinish

Memo

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Required Date: 1/25/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

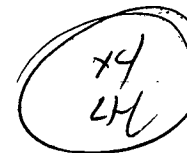
270

QC3- Inspect Part Finish

0.00

8/10/25

0.00



QC

Memo

Quality Control

280

Pick Kit

0.00

0.00



Packaging

Memo

Packaging

10-2-25 (4x) SD

290

QC4- 100% Inspect kits for completeness

0.00

0.00

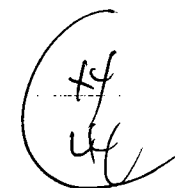
8/10/25



QC

Memo

Quality Control



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Work Order ID 55486

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Start Date: 1/19/10 Start Qty: 4.00

Required Date: 1/25/10 Req'd Qty: 4.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

300



Packaging

Packaging

0.00

Memo

0.00

Identify and pack for shipping as per PPP D350-591-121

Location:

PPP Rev: R

310



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Rec 1/25/10

6/02/25 JF
mf
10-2-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 19, 2010 1:33:40 PM

Page 1

Work Order ID: 55486

Parent Item: D350-591-121

Parent Item Name: Heli-Access-Step, LH

Comments: IPP Rev: E 02.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF
IPP rev. F 06.02.23 added grinding EC

Start Date: 1/19/10

Required Date: 1/25/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2244-116

Manufactured

No

110

Each

31.0000

2.1053

Step Extrusion

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

31

38023

31

D2850-1

Manufactured

No

140

Each

20.0000

4.0000

End Bracket

Warehouse

Loc Qty

Loc Code

Location

Premier

Mezz

20

31408

10

50267

10

D2582

Manufactured

No

190

Each

40.0000

4.0000

Step Leg Assembly

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

40

47644

3

48090

10

51343

16

53634

11

10.02.07

3
10.02.04

4
10.02.10

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 55486



Parent Item: D350-591-121



Parent Item Name: Heli-Access-Step, LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev: E 02.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF
IPP rev. F 06.02.23 added grinding EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS20600-AD4W3		Purchased	No			190	Each	2,505.000	64.0000			



Cherry Rivets



SL 10.02.10

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST	2505	
102929	37	
104715	10	
<u>106375</u>	490	
107939	1000	
111636	968	

D2673-34

Manufactured No

210

Each

27.0000

4.0000



End Plate



SL 10.02.10

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST	27	
<u>54361</u>	27	

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Required Date: 1/25/10

Comments: IPP Rev: E 02.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF
IPP rev. F 06.02.23 added grinding EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN4-16A Bolt		Purchased	No			290	Each	112.0000	8.0000		10-2-25	

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

112

~~112969~~

110

18949

2

290

f

290.3921

2.4000

D2856-400

Manufactured

No

Abraison Strip

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST403

290.3920842

~~50593~~

141.312084

52563

149.08

290

Each

149.0000

24.0000

Washer

Purchased

No

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

149

112314

149

16941

0

January 19, 2010 1:33:40 PM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Parent Item Name: Heli-Access-Step, LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev: E 102.10.21 Re-format; Incorporated D2351-041 IPP LKJ/RF
IPP rev. F 06.02.23 added grinding EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
2230-1		Manufactured	No			290	Each	244.0000	4.0000			



8
Lug

2X



10-2-25 SP

Warehouse Loc Qty Loc Code
Location

Main Warehouse

FG 80

53782 80

Main Warehouse

ST 4

51761 4

Main Warehouse

ST476 160

54755 160

Purchased No

290 Each

705.0000 8.0000



5
Bolt

4

10-2-25 SP (4)

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 705

105425 205

111668 500

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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MS21042L3		Purchased	No			290	Each	3,083.000	8.0000			



Nut



10-2-25 SP

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	3083
110844	35
111274	27
111668	52
112314	471
112385	498
113523	300
113537	700
113644	1000

8_____



Bolt

Purchased No

290 Each 543.0000 12.0000



10-2-25 SP

(4x)

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	543
113359	543
17406	0
51764	0

12_____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 19, 2010 1:33:40 PM

Work Order ID: 55486

Parent Item: D350-591-121

Parent Item Name: Heli-Access-Step, LH

Comments: IPP Rev:E 02.10.21 Re-format; Incorporated D2351-041 IPP:KJ/RF
IPP rev. F 06.02.23 added grinding EC

Start Date: 1/19/10

Required Date: 1/25/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M52104214		Purchased	No			290	Each	3,709.000	12.0000			



Nut

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	3709	
102552	6	
104248	6	
110507	184	
111827	2513	
113422	1000	
15924	0	

10-2-20

D2230-3



Lug

Manufactured No

290 Each 157.0000 4.0000



B55310 10-2-25 (40)

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST	7	
50306	5	
51568	2	

Main Warehouse

ST176	99	
53881	99	

Main Warehouse

ST476	51	
53781	51	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 19, 2010 1:33:40 PM

Work Order ID: 55486

Parent Item: D350-591-121

Parent Item Name: Heli-Access-Step, LH

Comments: IPP Rev: E 02.10.21 Re-format; Incorporated D2351-041 IPP KJ/RF
IPP rev. F 06.02.23 added grinding EC

Start Date: 1/19/10

Required Date: 1/25/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
3732-030 Rubber Cushion AN960JD10 Washer		Manufactured Purchased	No	1x		290	Each	0.0000	8.0000	2 per 153118	10-2-2354	
						290	Each	0.0000	16.0000	ML13288	10-2-2354	(4x)

Handwritten notes: 1A51149D03631 Q51 017 SP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN KE	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED PH	APPROVED PH	DRAWING NO. D2351	REV. E SHEET 1 OF 2
DATE 05.11.14		TITLE HIGH FLOAT STEP ASSEMBLY	SCALE NTS
A	95.02.15	NEW ISSUE	
B	97.05.22	END CAPS CHANGED	
C	97.07.23	ADDED BUSHING AND FACING INFO	
D	98.12.17	CHANGED TO BEND, D2850 REPLACES D2357 & D2358, INCORP. DEO 9084	
E	05.11.14	UPDATE FINISHING NOTE	

D2351 HIGH FLOAT STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY -041	QTY -042
D2351-041	High Float Step Assembly (LH)	X	
D2351-042	High Float Step Assembly (RH)		X
D2244-55.4	STEP EXTRUSION*	1	1
D2582	STEP LEG ASSEMBLY	1	1
D2673-34	STEP END PLATE	1	1
D2850-1	END BRACKET	1	
D2850-2	END BRACKET		1
MS20600AD4W3	RIVETS	16	16

*cut per drawing

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WORK ORDER
NO. 55786

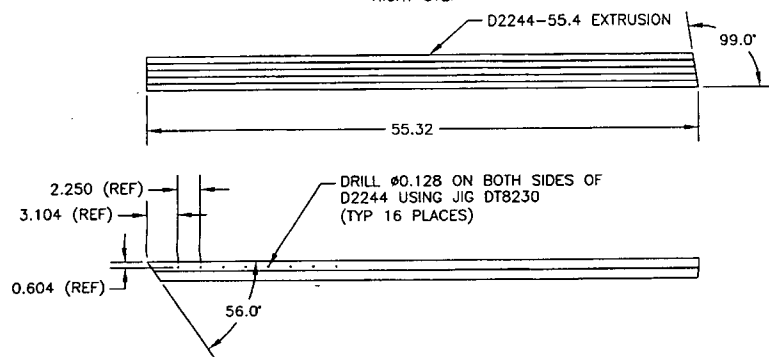
RELEASED
05.11.28

PH
ECN 1105
UNDER REVIEW
07.11.29
PUR FILE # 263

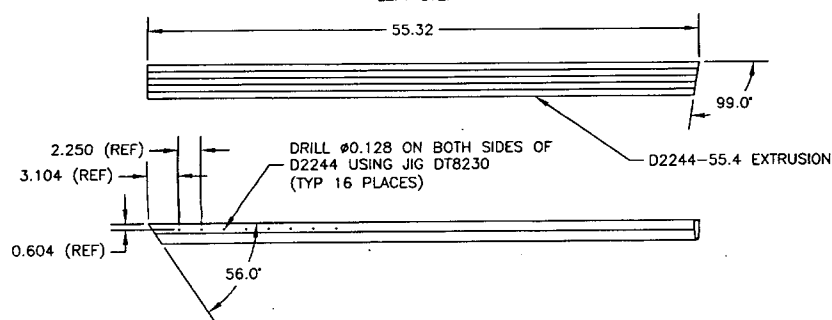
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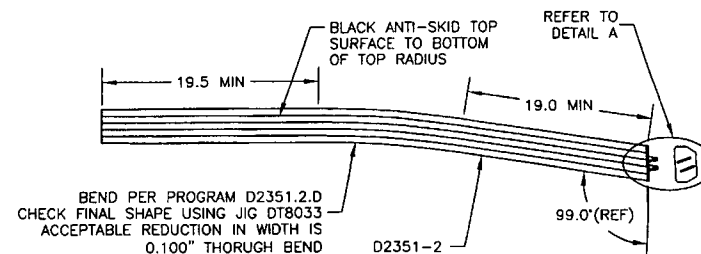
D2351-2 CUTTING/DRILLING DETAIL
RIGHT STEP



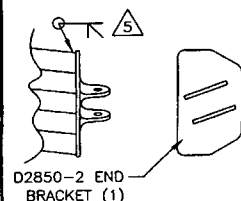
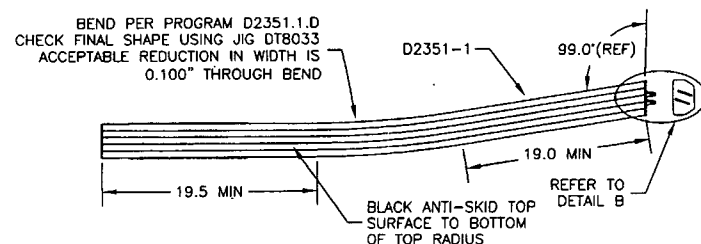
D2351-1 CUTTING/DRILLING DETAIL
LEFT STEP



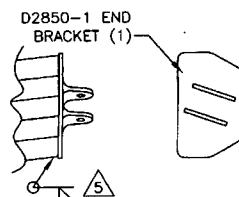
D2351-042 BENDING/ASSEMBLY DETAIL
RIGHT STEP



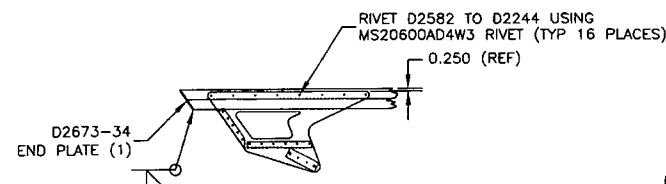
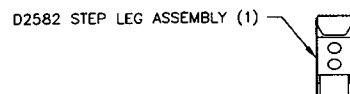
D2351-041 BENDING/ASSEMBLY DETAIL
LEFT STEP



DETAIL A
SCALE: 1:4



DETAIL B
SCALE: 1:4



GENERAL NOTES

- 1) WELD PER DART QSI 004
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

CHAMFER D2244 EXTRUSION 0.075"x45° BEFORE WELDING D2850-1 OR D2850-2 IN PLACE. DO NOT GRIND FLUSH.

RELEASED
05.11.28

UNDER REVIEW

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DESIGN KE	DRAWN BY PH	DART	DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA
CHECKED #	APPROVED #	DRAWING NO. D2351	REV. E SHEET 2 OF 2
DATE 05.11.14	TITLE HIGH FLOAT STEP ASSEMBLY	SCALE 1:12	

5. PARTS LIST

Qty -111A	Qty -113	Qty -115	Qty -117A	Qty -119	Qty -133	Part Number	Description
X						D350-591-111A	<i>Heli-Access-Step</i> ™, Long Step – High Skid
	X					D350-591-113	<i>Heli-Access-Step</i> ™, Short Step – High Skid
		X				D350-591-115	<i>Heli-Access-Step</i> ™, Short Step – Low Skid
			X			D350-591-117A	<i>Heli-Access-Step</i> ™, Pre-Flight Step
				X		D350-591-119	<i>Heli-Access-Step</i> ™, Long Step – Low Skid
					X	D350-591-133	<i>Heli-Access-Step</i> ™, Aft Maintenance Step
	1					D2310	STEP ASSEMBLY (HIGH-SHORT)
1						D2311	STEP ASSEMBLY (HIGH-LONG)
		1				D2354	STEP ASSEMBLY (LOW-SHORT)
				1		D2355	STEP ASSEMBLY (LOW-LONG)
					1	D2946-041	STEP ASSEMBLY (MAINTENANCE)
4	2	2	2	2		D2171	CLAMP
4	2	2	2	2		D2182B035	CUSHION
					4	D2230-1	MOUNTING LUG
					4	D2230-3	MOUNTING LUG
8	4	4	4	4		D2274	RADIUS BLOCK
			1			D2362-041	SUPPORT BRACKET
2	1			1		D2362-3	SUPPORT BRACKET
		1				D2362-5	SUPPORT BRACKET
2	1	1	1	1	2	D2856-400-720	ABRASION STRIP
					1	D2945	MOUNTING PLATE
2	2	2		2		AN3-37A	BOLT
					2	AN4-7A	BOLT
					4	AN4-11A	BOLT
					8	AN4-14A	BOLT
		4				AN4-16A	BOLT
8	4			4		AN4-20A	BOLT
1	1	1	4	1		AN4-22A	BOLT
4	4	4		4		AN960JD10	WASHER
10	6	2	4	6	14	AN960JD416	WASHER
		4				AN960JD416L	WASHER
2	2	2		2		MS21042L3	NUT
9	5	5	4	5	14	MS21042L4	NUT

Qty -121	Qty -122	Qty -123	Qty -124	Part Number	Description
X				D350-591-121	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
	X			D350-591-122	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X		D350-591-123	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X	D350-591-124	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
1				D2351-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1			D2351-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1		D2356-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1	D2356-042	STEP ASSEMBLY (LOW-SHORT, RH)
1	1	1	1	D2230-1	MOUNTING LUG
1	1	1	1	D2230-3	MOUNTING LUG
1	1	1	1	D2856-400-720	ABRASION STRIP
2	2	2	2	AN3-37A	BOLT
3	3	3	3	AN4-13A	BOLT
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD416	WASHER
2	2	2	2	MS21042L3	NUT
3	3	3	3	MS21042L4	NUT

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER
REF CANADIAN STC: SH92-6
REF FAA STC: SH967NE

For D350-591-121/-122/-123/-124/-133 steps, customers have the option of installing D2732-030 cushions under the D2230-1/-3 clamps to accommodate varying crosstube diameters and to improve fit. It is also acceptable to use longer or shorter AN4 bolts, and/or extra AN960JD416 washers under the nut to ensure 1.5 to 4 threads in safety. See Figure 1 on sheet 2 of this service instruction for reference.

For D350-591-121/-122 steps at CHG 005, D350-591-123/-124 steps at CHG 004, and D350-591-133 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -121	Qty -122	Qty -123	Qty -124	Qty -133	Part Number	Description
X					D350-591-121	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
	X				D350-591-122	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X			D350-591-123	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X		D350-591-124	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
				X	D350-591-133	<i>Heli-Access-Step</i> ™, Aft Maintenance Step
2	2	2	2	8	D2732-030	CUSHION
2	2	2	2	8	AN4-16A	BOLT

The DSI-9459-011 kit is available for customers with earlier model D350-591-121/-122/-123/-124 steps. Longer AN4 bolts are provided to fasten the clamps. The DSI-9459-013 kit is available for customers with earlier model D350-591-133 steps.

Qty -011	Qty -013	Part Number	Description
X		DSI-9459-011	Rubber Cushion Kit (for -121/-122/-123/-124 steps)
	X	DSI-9459-013	Rubber Cushion Kit (for -133 steps)
2	8	D2732-030	CUSHION
2	8	AN4-16A	BOLT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 09.06.24
CERT. NO.: SH92-6
ISSUE NO.: 11

B	AN4-16A WAS -17A FOR -013/-133 KIT	CP	09.06.24
A	NEW ISSUE	CP	09.04.17
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>g2</i>	DART AEROSPACE LTD	
DRAWN	<i>g2</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>PL</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>N/A</i>	DSI 9459	SHEET 1 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	OPTIONAL CLAMP MODIFICATIONS NTS	
DATE	09.06.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries